

MIGUNOV, I.N.

Work of the central scientific and technical library of the State
Committee of Chemistry. Plast.massy no.10:78-79 '60.
(MIRA 13:12)

(Moscow--Scientific libraries) (Plastics)

MIGUNOV, I.A., Cand Med Sci -- (diss) "Secretory
function of the stomach in the ~~case of~~ goiter."

Rostov-on-Don ~~xxx~~ 1958, 16 pp (Rostov-on-Don State
Med Inst) 200 copies (KL, 28-58, 110)

USSR/Human and Animal Physiology. Digestion.

V

Abs Jour: Ref. Zhur-Biol., No 6, 1958, 27002.

Author : I.A. Migunov.

Inst : Uzhgorod University.

Title : A Modification of the Method of Examining the Secretory and Evacuation Function of the Stomach.

Orig Pub: Nauch. zap. Uzhgorodsk. un-t, 1956, 19, 60-63.

Abstract: By means of a fine catheter introduced through the nose the stomach contents of a fasting patient are sampled; then the patient, with catheter in his stomach, receives breakfast (35 grams of white bread without crust and 400 ml of boiled water at 36 to 38°). Every 15 minutes for two hours after breakfast a sample of the stomach contents is taken

Card : 1/2

USSR / Human and Animal Physiology (Normal and Pathological).
Digestion.

T

Abs Jour : Ref Zhur - Biologiya, No 13, 1958, No: 60443
Author : Migunov, I. A.
Inst : Uzhgorod University
Title : Gastric Secretion in Goiter
Orig Pub : Nauchn. zap. Uzhgorodsk. un-t, 1955, 15, 173-181

Abstract : In patients with the euthyroid form of goiter (21), the gastric acidity was almost normal, and with thyrotoxicosis of the I degree it was increased in the majority of cases. In thyrotoxicoses of II and III degree, achlorhydria or reduced acidity was found, as well as sharp reduction in gastric juice secretion (in 80% of cases) and in fermentation, and also a prolonged latent period (up to an hour and longer). In the pathogenesis of the disturbances of gastric secretion,

Card 1/2

ACC NR: AR6019859

(N)

SOURCE CODE: UR/0398/66/000/001/V012/V012

AUTHOR: Migunov, G. M.

TITLE: Experience in the operation of the 6 ChSP 18/22 engine

SOURCE: Ref. zh. Vodnyy transport, Abs. 1V73

REF SOURCE: Proizv.-tekhn. sb. Tekhn. upr. M-va rechn. flota RSFSR, no. 3 (47), 1965, 14-16

TOPIC TAGS: diesel engine, internal combustion engine, marine engine, mechanical engineering, engine reliability, inland waterway transportation, ship

ABSTRACT: Motor tugs have been laid up for repairs to the 6 ChSP 18/22 engine, or to the transmission for 46.7 hours out of every 1000 hours of operation. The engines operated for 2000 hours during a season. Ships fitted with 6 NV D-24 and 26 engines were laid up for repairs for 7.7 hours per 1000 hours of operation. The shortcomings serving to reduce engine hours for the 6 ChSP 18/22 are described, as are measures for eliminating them. 2 figures. S. Korzh. [Translation of abstract]

SUB CODE: 21,13

Card 1/1

UDC: 621.431.74.004

MIGUNOV, Boris Ivanovich; RYVKIND, A.V., red.; BASPMAKOV, G.M.,
tekhn. red.

[Pathological anatomy of diseases of the maxillo-dental
system and mouth cavity] Patologicheskaya anatomiya zabo-
levaniya zuchelivustnoi sistemy i polosti rta. Moskva, Medgiz, 1963.
134 p. (MIRA 16:5)

(STOMATOLOGY)

MIGUNOV, B.I., prof.; KOLESOV, A.A., kand.med.nauk

Some clinical and morphological data on eosinophilic granuloma of
the jaws. Stomatologiya 38 no.6:47-54 N-D '59. (MIRA 13:4)

1. Iz kafedry khirurgicheskoy stomatologii (zav. - prof. A.I. Yevdokimov) i kafedry patologicheskoy anatomii (zav. - prof. B.I. Migunov) Moskovskogo meditsinskogo stomatologicheskogo instituta (direktor - dotsent G.N. Beletskiy).

(JAWS--TUMORS)

MIGUNOV

MIGUNOV, B.I., prof.

So-called epulis gigantocellularis. Stomatologiya 36 no.1:31-36
Ja-F '57. (MIRA 11:1)

1. Iz kafedry patologicheskoy anatomii Moskovskogo meditsinskogo
stomatologicheskogo instituta (dir. - dotsent G.N.Baletskiy)
(GUMS--TUMORS)

MIGUNOV, B.I., professor.

Tat'iana Pavlovna Vinogradova.. Arkh.pat. 17 no.1:92-93 Ja-Mr
'55. (MLRA 8:10)

(BIOGRAPHIES,
Vinogradova, Tat'iana P.)

MIGUNOV, Prof. B.I.; KOLESNEVA, Z.G.; CHUPRYNINA, N.M.

Eosinophilic granuloma of the jaws. Stomatologiya no.3:29-33
My-Je '55. (MLRA 8:9)

1. Iz kafedry patologicheskoy anatomii (zav.prof B.I.Migunov)
i kafedra terapevticheskoy i khirurgicheskoy stomatologii
Moskovskogo meditsinskogo stomatologicheskogo instituta
(dir.dotsent, G.N. Beletskiy)
(EOSINOPHILIC GRANULOMA,
jaws)
(JAWS, neoplasms,
eosinopholic granuloma)

MIGUNOV, B.I., prof.; ZHUKOVA, E.I., kandidat meditsinskikh nauk

Pathomorphologic processes and pathogenesis of paradontosis.
Stomatologiya, no.3:3-12 My-Je '54. (MLRA 7:6)

1. Iz kafedry patologicheskoy anatomii Moskovskogo meditsinskogo
stomatologicheskog instituta (dir. dotsent G.N.Beletskiy)
(PERIODONTIUM, diseases,
*pathogen. & patho-morphol. aspects)

MIGUNOV, B. I.

DVIZHKOV, P.P.; MIGUNOV, B.I.

Clinico-anatomical conferences; discussion on S. M. Pavlenko's article "Certain methods and forms of reorganization of medical science and practice". Sovet. med. 16 no. 6:31-34 June 1952.

(CLML 22:4)

1. Professors. 2. Moscow.

BLUMENTSEV, A.M.; KHARITONOV, S.Ye.; KHOLIN, V.N.; MIGUNOV, B.B.

Quantitative evaluation of iron rocks and ore in the Krivoy Rog
Basin based on the radiometric data of holes. Geofiz. sbor.
no.9:97-100 '64. (MIRA 18:6)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut yadernoy
geologii i geofiziki i Dnepropetrovskaya geofizicheskaya
ekspeditsiya tresta "Ukrgeofizrazvedka".

MIGUNOV, B.B.

Possibilities of using neutron methods in the investigation of
holes in ore deposits. Prikl.geofiz. no.30:192-197 '61.

(MIRA 14:10)

(Radioactive prospecting)

MIGUNOV, A.M.; POVALISHNIKOVA, A.S.; GRADUSOV, B.F.

Ultrasound absorption in methyl acetate and its mixtures
with methyl alcohol. Prim. ul'traakust. k issl. veshch.
no.13:213-218 '61. (MIRA 1686)

(Absorption of sound)
(Methanol---Acoustic properties)
(Acetic acid---Acoustic properties)

MIGUNOV, A. F.,

Agriculture & Plant & Animal Industry.

Experience in silviculture for shelterbelts on a collective farm beyond the Volga.
Saratovskoe obl. gos. izd-vo, 1950.

Monthly List of Russian Accessions, Library of Congress, April 1952 UNCLASSIFIED.

MIGULYA, P.S.

Effect of the degree of weathering on the floatability of coal.
Trudy Inst.gor.dela AN URSR no.11:118-122 '62. (MIRA 16:2)
(Coal weathering) (Flotation)

ILLEGIBLE

MIGUL'KO, V. F.

"Durability of Concrete Receptacles Under the Conditions of a Sewer System." Sub 25 Jun 51, Moscow Order of the Labor Red Banner Construction Engineering Inst imeni V. V. Kuybyshev

Dissertations presented for science and engineering degrees in Moscow during 1951.

XX: Sum. No. 480, 9 May 55

Mastering of a new practice on the sinter plant of the ³⁵⁶
Cherepovetskiy Works. (Cont.)

be unreliable due to difficult operating conditions (rapid corrosion of vital parts). The operation of the conveyor belt transporting sinter to furnace bunkers initially presented some difficulties - sticking of sinter in funnels (chutes) and burning of the belt due to inefficient cooling - which were overcome. Basicity of the sinter produced was initially about 0.5, then was raised to about 1, 1.2 and finally to 1.3 (chemical composition and drum test - Table 2 and size distribution of sinter in furnace bunkers - Table 3). Size distribution of self-fluxing sinter was much finer. Changes in the size distribution of sinter during transport from the sinter plant to furnace bunkers was investigated. The following results were obtained:

CaO/SiO ₂	Sizes mm:	>50	25-50	12-25	8-12	5-8	0-5
	after vibr.screens	73.0	7.1	6.9	4.1	2.8	6.1
	%						
0.4	furnace bunkers	31.6	24.4	24.5	6.6	6.4	6.5
	after vibr.screens	18.0	6.1	19.5	39.4	12.0	5.1
	%						
1.2	furnace bunkers	14.8	2.9	14.3	45.0	14.8	8.2

The operation of the blast furnace with sinter of

MIGULITSKIY, L.R.

AUTHORS: Yakubtsiner, N. M., Cand. Tech. Sc., and Migulitskiy, ³⁵⁶L.R.
Eng. (Leningrad Polytechnical Institute and Cherepovetskiy Metallurgical Works).

TITLE: Mastering of a new practice on the sinter plant of the Cherepovetskiy Works. (Osvoyeniye tekhnologii i novoy tekhniki na aglofabrike Cherepovetskogo zavoda).

PERIODICAL: "Stal" (Steel), 1957, No.4, pp. 293-300 (U.S.S.R.)

ABSTRACT: A description of the plant (Figs. 1 and 2) and characteristic data on raw materials (Table 1) are given. The ore used - concentrates, particle size distribution of which is similar to that of flue dust. Main features of the sinter plant: 1) surface area of the strand - 75 m²; 2) circular cooler with natural draught; 3) shuttle strand feeder evenly distributing the feed across the width of the strand; 4) double screening: stationary screens (25 mm) for hot sinter and vibrating screens (12 mm) for cooled sinter; 5) preheating of the mix with hot return fines and 6) the transfer of cooled sinter to furnace bunkers on a rubber conveyor belt. Sinter cooler with natural draught was found to be ineffective and the introduction of forced draught is considered. The effect of preheating the mix with return fines was not evaluated as it was impossible to have prolonged operation with cooled return fines. Weighing machines for the weighing of the mix before and after the addition of return fines (control of the proportion of return fines) were found to

MIGULINA, V.M., kand.med.nauk

Preservation of sheep blood for Wassermann reaction with
glucose-boric-saline solution. Vest.derm.i ven. 35 no.3:
40-47 Mr '61. (MIRA 14:4)

1. Iz kafedry kozhnykh i venericheskikh bolezney (nahc. - chlen-
korrespondent AMN SSSR prof. S.T. Pavlov) Voenno-meditsinskoy
ordena Lenina akademii imeni S.M. Kirova.
(SYPHILIS--WASSELMANN REACTION)

MIGULINA, V. M.

Chemical Abstracts
Vol. 48 No. 5
Mar. 10, 1954
Biological Chemistry

The technique of microreaction of flocculation according to Maksimov with active serum. V. M. Migulina: *Vestnik Venerol. Dermatol.* 1953, No. 5, 35-8. - In the Maksimov technique (no ref. given) for microfloculation with active serum the complete repression of complement activity of human serum is obtained with $ZnSO_4$ concn. which also causes cloudiness of the medium; $ZnSO_4$ concn. from 0.1 to 0.065% increases the sensitivity of the Maksimov reaction without cloudiness. In this form the reaction gives better agreement with the Wassermann reaction. G. M. K.

Military Med. Acad. in S. M. Kirov

GUZAL, R.S.; PIVIL, I.I. (Leningrad)

Morphology of the vaccination process in guinea pigs vaccinated with diphtheria-pertussis, pertussis vaccine and anatoxin. Arkh. pat. no. 12:32-38 1961 (Mikr. 10:1)

L. Is patomorfologicheskoy laboratorii (ass. - med. nauch. dr. B.S. Gusman) Kontrol'nogo Instituta zashchity khimichesk. - kikh preparatov imeni Tarashevicha (director L.S. Pivovarov).

MAYEVSKAYA, T.M.; MIGULINA, T.V. (Moskva)

Experience with the cultivation of human malignant tumors in chick embryos. Arkh.pat. 22 no.7:39-45 '60. (MIRA 14:1)

1. Iz Instituta virusologii imeni D.I.Ivanovskogo AMN SSSR (direktor - prof. P.N.Kosykov) i Gosudarstvennogo kontrol'nogo instituta imeni L.A.Tarasevicha (direktor L.S.Ogloblina).
(CANCER) (TISSUE CULTURE)

MIGULLINA, T.V.

8500. Action of large doses of penicillin on the state of the internal organs of animals under test. T. V. Migullina. *Isk. Biol.*, 1955, No. 9, 851-854. *Referat. Zh. Biol.*, 1956, abstr. No. 79107. Penicillin was administered i.m. to rabbits, 25,000 units to one and to the other 5, 200,000 units/kg, daily for 18 days, after which they were destroyed. On histological investigation of the lungs, heart, spleen, liver, and adrenals, in spite of the administration to the animals of huge doses of penicillin (up to 8.5 million units in 18 days), no changes of a toxic nature were revealed. (Russian)

T. V. Migullina

MAYEVSKAYA, T.M.; NIKULINA, L.M.; MIGULINA, T.V.

Culture of human papilloma of the larynx in a chick embryo. Vop.
virus. 1 no.3:42-47 My-Je 1956. (MLRA 10:1)

1. Institut virusologii imeni D.I.Ivanovskogo AMN SSSR, klinika
bolezney ukha, gorla i nosa pediatricheskogo fakul'teta II
Moskovskogo meditsinskogo instituta imeni I.V.Stalina i Gosudar-
stvennyy kontrol'nyy institut imeni L.A.Tarasevicha, Moskva.

(PAPILLOMA,

larynx, cultivation in chick embryo (Rus))

(LARYNX, neoplasms,

papilloma, cultivation in chick embryo (Rus))

(TUSSUE CULTURE,

cultivation of papilloma of larynx in chick embryo (Rus))

PHIL, V.S., podpolkovnik meditsinskoy sluzhby, kad. med. rank;
NICHOLAS, R.A.

Method of polycardiography using an ink-writing apparatus.
Voen.-med. zhurn. no. 1:85 Ja '66 (MIRA 19:2)

MIGULIN, Ye.V. [deceased].

Yaroslavl Technological Institute. Kauch. i rez. 16 no.12:22-23
D '57. (MIRA 11:3)

1. Yaroslavskiy tekhnologicheskii institut.
(Yaroslavl--Technical education)

ACC NR: AP7001338

weak fields. The experimental and calculated curves agree well, the quantitative differences being due to the approximate nature of the theory, which is valid strictly only in free space. It is concluded that the large Faraday angles and the relatively small damping in strong magnetic fields make this phenomenon useful with nonreciprocal microwave devices such as ferrites. The authors thank V. S. Ivleva and D. A. Dolgikh for supplying the InSb samples. Orig. art. has: 2 figures and 3 formulas.

SUB CODE: 20/ SUBM DATE: 19Sep66/ ORIG REF: 001/ OTH REF: 003

Card 2/2

ACC NR: AP7001338

SOURCE CODE: UR/0386/65/004/011/0445/0449

AUTHOR: Afinogenov, V. M.; Migulin, V. V.; Trifonov, V. I.

ORG: Institute of Radio Engineering and Electronics, AN SSSR (Institut radiotekhniki i elektroniki AN SSSR)

TITLE: Singularities of the Faraday effect in n-InSb in the millimeter band

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki. Pis'ma v redaktsiyu. Prilozheniye, v. 4, no. 11, 1966, 445-449

TOPIC TAGS: indium compound, antimonide, Faraday effect, microwave technology

ABSTRACT: The authors investigated the Faraday effect in n-type InSb at 77.8K as a function of the magnetic field and of the sample thickness. The experimental setup included a klystron oscillator operating at 4 mm, attenuators, a measuring pickup, and an indicator showing the power passing through the sample. The position of the polarization plane was indicated by the minimum of the indicator reading. The measurements revealed the expected oscillations of the angle of rotation of the polarization plane vs. the magnetic field, as well as deviations brought about by reflections from the boundary planes. At sample thicknesses that were multiples of the electromagnetic wave, geometric resonance took place in the sample and the Faraday angle was maximal in this case. The peaks of the oscillations became sharper with increasing magnetic field, owing to the decreased losses in the semiconductor. Plots of the Faraday angle vs. the magnetic field show that the rotation angle becomes negative in

Card 1/2

L 38900-66 ENT(1)

ACC NR: AP6029724

SOURCE CODE: UR/0109/66/011/005/0966/0967

AUTHOR: Zernov, D. V.; Timofeyev, P. V.; Fursov, V. S.; Migulin, V. V.; Spivak, G. V.; Spasskiy, B. I.; Nilender, R. A.; Grozdozer, S. D.; Shemayev, A. M.; Solntsev, G. S.; Kuzovnikov, A. A.; Zaytsev, A. A.; Vasil'yeva, M. Ya.; Mitsuk, V. Ye.; Dubinina, Ye. M.; Zheludeva, G. A.

ORG: none

TITLE: Nikolay Aleksandrovich Kaptsov

SOURCE: Radiotekhnika i elektronika, v. 11, no. 5, 1966, 966-967

TOPIC TAGS: electric engineering personnel, magnetron, klystron, corona discharge, gas conduction, gas discharge plasma

ABSTRACT: N. A. Kaptsov passed away 10 February 1966. He was a student of the famous P. N. Lebedev, and performed many fundamental investigations in the development of modern electronics. He was the creator and leader of the chair of electronics of Moscow State University. He developed the concept of phase grouping of electrons. His ideas are the basis for the development of the magnetron and klystron. He developed the concept explaining the phenomenon of corona discharge. He also developed ideas connected with formation of gas conduction and phenomena in a gaseous-discharge plasma. Kaptsov served for years as the head of the physical laboratory and consultant to the Moscow Electron Tube Plant. He was the author of numerous books, including "Physical Phenomena in Vacuum and in Gases, which was translated into foreign languages; he also created and taught numerous electronics courses. [JPRS: 36,501]

SUB CODE: 05, 09 / SUBM DATE: none

Card 1/1

0778 0203

VVEDENSKIY, B.A., glav. red.; VUL, B.M., glav. red.; SHTEYNMAN, R.Ya., zam. glav. red.; BALDIN, A.M., red.; VONSOVSKIY, S.V., red.; GALANIN, M.D., red.; ZEMLEV, D.N., red.; ISHLINSKIY, A.Yu., red.; KALITSA, P.L., red.; KAPITOV, N.A., red.; KOZODAYEV, M.S., red.; LEVICH, V.G., red.; LOYTSYANSKIY, L.G., red.; LUK'YANOV, S.Yu., red.; MALYSHEV, V.I., red.; MIGULIN, V.V., red.; REBINDER, P.A., red.; SYRKIN, Ya.K., red.; TARG, S.M., red.; TYABLIKOV, S.V., red.; FEYNBERG, Ye.L., red.; KHAYKIN, S.E., red.; SHUBNIKOV, A.V., red.

[Encyclopedic physics dictionary] Fizicheskiy entsiklopedicheskiy slovar'. Moskva, Sovetskaya Entsiklopediya.
Vol.4. 1965. 592 p. (MIRA 18:1)

VASIL'YEV, V.N.; SLOBODENYUK, G.I.; TRIFOROV, V.I.; KHOTUNTSEV,
Yu.L.; MIGULIN, V.V., red.; MASHAROVA, V.G., red.

[Regenerative transistorized parametric amplifiers;
problems of theory and design] Regenerativnye poluprovod-
nikovye parametricheskie usiliteli; nekotorye voprosy
teorii i rascheta. Moskva, Sovetskoe radio, 1965. 447 p.
(MIRA 18:8)

GLADUN, A.D.; PEREPELYATNIK, P.A.; MIGULIN, V.V.

Concerning V.N.Iakovlev's article, "Use of a slowly varying
parameters technique in studying nonlinear self-oscillatory
systems with delay." Radiotekh. i elektron. 8 no.2:355-357
F '63. (MIRA 16:2)
(Automatic control) (Differential equations)

The calculation of the ...

S/188/63/000/001/005/014
B104/B102

averaged over an oscillation period. A calculation of the parametric excitation of an electric oscillation with a frequency equal to the variation frequency of a capacitance allows of determining the excitation conditions and the width of the excitation region. If there is no damping the width of this region agrees with that calculated from the second instability region of the Mathieu equation. ✓

ASSOCIATION: Kafedra teorii kolebaniy (Department of the Theory of Oscillations)

SUBMITTED: April 14, 1962

Card 2/2

45163

S/188/63/000/001/005/014
B104/B102

AUTHOR: Migulin, V. V.

TITLE: The calculation of the parametric excitation of oscillations
at the frequency of parameter changes

PERIODICAL: Moscow. Universitet. Vestnik. Seriya III. Fizika,
astronomiya, no. 1, 1963, 32 - 37

TEXT: It is shown possible to apply the method of a slowly varying amplitude for calculating the parametric excitation of oscillations having the same frequency as that of the change of a parameter. It is proved that the energy can be introduced into the oscillating system at the expense of the work done by the forces causing the change in the parameter due solely to the unsymmetry of the excited oscillations. This dissymmetry can be calculated by the method of the slowly varying amplitudes by adding a non-oscillating term to the solution sought; the added term being small and having the same order as the modulation-depth coefficient of the parameter. The relation between the magnitude of the added term and the amplitude of oscillations can be determined from the obvious condition that the voltage of the capacitor whose capacitance is changed periodically is zero when
Card 1/2

IL'INOVA, T.M.; MIGULIN, V.V.

Parametric excitation of oscillations in a nonlinear circuit.
Vest. Mosk. un. Ser.3: Fiz., astron. 17 no.1:55-62 Ja-I '62.
(MIRA 15:2)

1. Kafedra teorii kolebaniy fizicheskogo fakul'teta Moskovskogo
gosudarstvennogo universiteta.

(Junction transistors)

Combination ...

S/109/62/007/011/008/012
D266/D308

The conclusions obtained by these approximate calculations were experimentally confirmed.

ASSOCIATION: Fizicheskiy fakul'tet Moskovskogo gosudarstvennogo universiteta im. M.V. Lomonosova
(Physics Faculty of Moscow State University im. M.V. Lomonosov)

SUBMITTED: June 30, 1962

Card 3/3

Combination ...

S/109/62/007/011/008/012
D266/D308

$$y = u \cos \tau + v \sin \tau$$

(where u and v are assumed slowly varying) the condition of oscillation at the frequency ω is obtained in the form

$$\left(\frac{3}{4} \gamma Q^2 - \frac{1}{2} E\right)^2 < \frac{9}{16} \gamma^2 \lambda_1^2 \lambda_2^2 - v^2$$

where

$$Q^2 = \lambda_1^2 + \lambda_2^2$$

The middle of the oscillation region is given by the condition

$$E_0 = \frac{3}{2} \gamma Q^2$$

and the corresponding amplitude

(9)

$$A_0 = 2 \sqrt{\lambda_1^2 \lambda_2^2 - \frac{16 \gamma^2}{9}}$$

(11)

Card 2/3

42729

S/109/62/007/011/008/012
D266/D308

AUTHOR:

Migulin, V.V.

TITLE:

Combination parametric excitation of
oscillations

PERIODICAL:

Radiotekhnika i elektronika, v. 7, no. 11,
1962, 1962 - 1963

TEXT:

The author refers to an earlier paper (V.V. Migulin and Ya.L. Al'pert, ZhTF, 1936, v. 6, no. 5, 812) in which a problem of parametric oscillations was treated. A circuit containing a non-linear capacitance was considered which is fed at two different frequencies ω_1 and ω_2 . If $\omega_1 + \omega_2$ is nearly equal to $2\omega_0$ assuming that $\nu = \frac{R}{2\omega L}$, $\xi = 1 - \frac{\omega_0^2}{\omega^2}$ and γ (a coefficient expressing the degree of non-linearity) are small and introducing a new variable y , a simplified differential equation is obtained for the variation charge. Solving this equation by the substitution

Card 1/3

MIGULIN, V.V.; LOPUKHIN, V.M.; GUSEV, V.D.

Fourth All-Union Conference of the Ministry of Higher and Secondary
Specialized Education of the U.S.S.R. on Radio Electronics. Vest.
Mosk. un. Ser. 3: 82-84 Ja-F '61. (MIRA 14:4)
(Radio—Congresses)

1005

S/109/60/005/06/010/021
E140/E163

On Forced Oscillations of a Parametrically Regenerated System

ASSOCIATION: Moskovskiy gosudarstvennyy universitet imeni
M.V. Lomonosova, Fizicheskiy fakul'tet
(Physics Faculty of the Moscow State University
imeni M.V. Lomonosov)

SUBMITTED: September 14, 1959

Card 3/3

4

8655

S/109/60/005/06/010/021
E140/E163

On Forced Oscillations of a Parametrically Regenerated System

components at frequencies p, ω and $2\omega - p$. With increase of input signals suppression of the oscillations at frequency ω takes place. In a single-circuit parametric amplifier increase of pumping amplitude above the critical value may lead to an operating regime characterised by low gain with the same spectral composition as for the partially excited system. The conclusions were verified experimentally (Refs 5, 6) for the case of a coherent force. Experiments to be described in a separate paper have shown that for incoherent forces the processes in the parametrically regenerated system in fact occur in accordance with the theory presented in the present paper. Aside from the two or three fundamental harmonic components derived theoretically there were also other combination frequencies of higher order but with substantially smaller amplitudes. In the present theory these higher-order combination frequencies were neglected. There are 3 figures and 6 Soviet references.

Card
2/3

4X

9.2572

S/109/60/005/06/010/021
E140/E163

AUTHOR: Migulin, V.V.

TITLE: On Forced Oscillations of a Parametrically Regenerated System

PERIODICAL: Radiotekhnika i elektronika, 1960, Vol 5, Nr 6,
pp 955-961 (USSR)

ABSTRACT: In previous studies of parametric amplifier and oscillator systems the resonant phenomena were studied almost exclusively with rigorously integral relations between the frequency of parameter variation and the signal frequency. However, in many practical cases there is no coherence between the parameter variation and the signal oscillation. Furthermore the system is in principle non-linear. It is necessary to consider separately the cases where the depth of modulation of the parameter is less than critical (parametric regeneration) and greater than critical (parametric excitation). The subject of the present article is the analysis of these questions. It is shown that in a parametrically excited system with small input signal, oscillations arise containing three fundamental harmonic

Card
1/3

20336

Parametric regeneration

S/188/60/000/006/009/011
B101/B204

ASSOCIATION: Moskovskiy gosudarstvennyy universitet, Kafedra teorii
kolebaniy
(Moscow State University, Department of Oscillation Theory)

SUBMITTED: July 15, 1960

44

Card 4/4

Parametric regeneration

20936

S/188/60/000/006/009/011
B101/B204

obtains the equation $\ddot{x} + [2\delta - kf(t)x] = 2\delta$ (4). For the case in which m is small, it is possible to put (with sufficient accuracy):

$\bar{x} = 1 + 0.5(m/\pi\gamma)^2$ (8), where $2\gamma = 2\delta/\omega = R/\omega L$. For the incoherent case the following conclusions are drawn here: 1) The supply (or loss) of energy is not constant, but periodically changes amount and sign in dependence on the difference between oscillation frequency and the half frequency of the change in capacity. 2) The periodic change of capacity entails periodic changing of the oscillation energy of the system. This leads to periodic oscillations, which consists of several frequencies differing by 2Ω . 3) The dependence of the energy supply and energy loss on the present value of the oscillation energy causes the mean value of the energy to be greater than the mean value at constant capacity. Here from a positive regeneration by the effect of the forces changing the capacity results on the average. Mention is made of G. S. Gorelik, M. A. Divil'kovskiy, S. M. Rytov, S. M. Rubchinskiy, and A. N. Vakhrameyev. There are 2 figures and 5 Soviet-bloc references.

Card 3/4

4

Parametric regeneration

20336
S/188/60/000/006/009/01
B*01/E204

$m = (C_{\max} - C_{\min}) / (C_{\max} + C_{\min})$ is the modulation factor. For the incoherent case $x = A \cos[\omega t + \Psi(t)]$ is written down. If p differs little from ω , $\Psi(t)$ is a slowly changing phase. Regeneration is here carried out periodically with the frequency $2\Omega = 2|p - \omega|$. The energy supply for each period equals $\Delta N = N \alpha f(t)$ (2), where $f(t)$ is a periodic function with the period $T_1 = \pi/\Omega$, whose average value equals zero; α is the efficiency of energy supply, m the modulation factor. The energy relations are studied, the conception of the intensity $P = \Delta N / (\pi/\omega)$ developed by the circuit is introduced and written down: $dN/dt = P + P_0 - P_R$, where $P = N[\alpha m / (\pi/\omega)]$, P_0 is the intensity from outside, P_R is the average intensity loss. For the harmonic process $P_R = 0.5 I^2 R = NR/L = 2N\delta$; $2\delta = R/L$, where $N = 0.5 L I^2$ and I is the amplitude of the current circuit. One obtains $\dot{N} + [2\delta - k f(t)] N = P_0$; $k = \alpha m \omega / \pi$ (3). The steady energy of the enforced oscillation is $N_* = P_0 / 2\delta$. One puts $x = N / N_*$ and one

Card 2/4

9.2580 (and 2104)

20336

S/188/60/000/006/009/011
B101/B204AUTHOR: Migulin, V. V.

TITLE: Parametric regeneration

PERIODICAL: Vestnik Moskovskogo universiteta. Seriya 3, fizika,
astronomiya, no. 6, 1960, 67-77

TEXT: The regeneration in oscillating systems is dealt with. Regeneration is defined as a partial or complete compensation of energy losses (L. I. Mandel'shtam and N. D. Papaleksi, Ref. 1). While this is usually brought about by means of feedback, the present paper deals with compensation of energy losses by acting upon the capacity of the circuit. In this case, regeneration is constant only for a certain assembly of frequencies. The processes in a linear oscillation circuit are investigated, in which the capacity changes jump-like with the frequency 2ω . For the coherent case, when in the circuit stationary enforced oscillations exist, which are near harmonic oscillations (frequency $p = \omega$ or $n\omega$) $\Delta N = q_0^2 m / 2 = 2Nm$ (1a) is written down; or $\Delta N = -2Nm$ (1b). ΔN is the change in energy, q_0 the amplitude of the charge.

Card 1/4

MIGULIN, V.V.; VAKHRAMEYEV, A.N.

New method for heteroparametric regeneration of an electric
oscillating circuit. Nauch. dokl. vys. skoly; fiz.-mat.nauki
no.1:138-142 '58. (MIRA 12:3)

1. Moskovskiy gosudarstvennyy universitet im. M.V. Lomonosova.
(Electric circuits)

PHASE I BOOK EXPLOITATION 859

Migulin, Vladimir Vasil'yevich

Lektsii po osnovam radiolokatsii (Lectures on the Fundamentals of Radar)
[Moscow] Izd-vo Moskovskogo univ-ta, 1958. 120 p. 26,000 copies
printed.

Sponsoring Agency: Moscow. Universitet.

Ed.: Nosyreva, I.A.; Tech. Ed.: Gur'yanov, V.P.

PURPOSE: The monograph is a textbook for senior students of radio physics.

COVERAGE: Some specific problems of radar are discussed and a new approach to radar is given. Such aspects as radiation and propagation of electromagnetic energy, generation, conversion, transmission, reception, and amplification of superhigh frequencies are discussed. No personalities are mentioned. There are no references.

Card 1/4

109-9-1/15

Investigation of the Operating Characteristics of Transistors in Nonlinear Circuits.

necessary. These circuits are selected in such a manner that when changing over from one circuit to the next circuit, there should be no discontinuity in the operation of the transistor. The nonlinear analysis involves a single equivalent circuit but its parameters are variable. It is also possible to adopt another type of approach, that is, an analysis which is based directly on the physical phenomena occurring in a transistor. However, this approach seems to be rather complicated. There are 16 Slavic references.

ASSOCIATION: Physics Faculty of the Moscow State University
im. M.V. Lomonosov (Fizicheskiy Fakul'tet Moskovskogo
Gosudarstvennogo Universiteta im. M.V. Lomonosova)

SUBMITTED: February 20, 1957.

AVAILABLE: Library of Congress.

Card 2/2

MIGULIN, V.V.

109-9-1/15

AUTHOR: Migulin, V.V.

TITLE: Investigation of the Operating Characteristics of Transistors in Non-Linear Circuits. (Ob Issledovaniyakh osobennostey raboty poluprovodnikovyykh triodov v nelineynykh skhemakh)

PERIODICAL: Radiotekhnika i Elektronika, 1957, Vol.II, Nr 9, pp.1091-1096 (USSR)

ABSTRACT: An investigation programme dealing with various transistor circuits was commenced sometime ago at the Chair of the Theory of Oscillations of the Physics Faculty of the Moscow State University. Some of the results obtained during that investigation have already been published (Refs.1 to 6). Further results are being published in the present issue of the journal. The main problem dealt with in these works is the determination of the equivalent circuits which would adequately describe the properties of transistors in the investigated devices. Some of the equivalent circuits are linear, but in many cases, such as the oscillator circuits or trigger circuits, it is necessary to employ a nonlinear type of approach. Analysis of the transistor circuits can be carried out by means of a stage by stage linear approximation or by means of nonlinear equations. In the first case a large number of linear equivalent circuits is

Card 1/2

11.9.11.13 U.V.

621.373 707
Self-Oscillations in a System with
Delayed Feedback. Yu. M. Arvan &
V. V. Mikhlin. (Radiotekhnika i Elektronika,
April, 1958, Vol. No. 4, pp. 418-427.) A
system comprising an amplifier and a
time-delay feedback circuit is considered,
taking into account the dispersion of the
circuit. The predicted effects on the
oscillation characteristics of changes in the
circuit parameters were confirmed experi-
mentally.

2

Physics Faculty, Moscow State U.

OK

MIGULIN, V.V.; STRELKOV, S.P.; TEODORCHIK, K.F.

The work of Moscow University scholars in the field of physics
of vibrations and contemporary problems in the theory of vibration
Vest.Mosk. un. 10 no.45:125-132 Ap-May '55. (MLRA 8:8)
(Vibration)

MIGULIN, V.V.

AID P - 1608

Subject : USSR/Electricity

Card 1/1 Pub. 27 - 17/27

Author : Migulin, V. V., Doc. of Phys. Mat. Sci., Prof.,
Moscow

Title : Karl Friedrich Gauss. The centenary of his death
(History of Electrical Engineering)

Periodical : Elektrichestvo, 3, 73-76, Mr 1955

Abstract : The author gives a short biographical note on Gauss
and then discusses in more detail Gauss' theories and
contributions in the field of science and mathematics.
Five references, 1 photograph

Institution: Moscow State University im. Lomonosov

Submitted : No date

VAYSENBERG, A. G.; TROITSKOY, V. A.; MIGULIN, V. V.
MIGULIN, V. V.

"Elektronika v Yadrenoi Fizike," (Electronics Exptl. Techniques), Edition of
Foreign Lit., MOSCOW 1951.

MIGULIN, V. V.

PA 75T34

USSR/Electronics
Oscillators, Transitron
Oscillations - Relaxation

May 1948

"Study of a Relaxation Oscillator of the Transitron Type," V. V. Migulin and T. N. Yastrebtsova, Sci Res Inst of Phys, Moscow State U, 12 pp

"Zhur Tekh Fiziki" Vol XVIII, No 5

Reports experimental study of transitron characteristics of 6Zh7 tube, and various performances of RS-oscillator working on this tube. Qualitative examination of processes in a similar system gives results in agreement with experiment. Submitted 24 Nov 1947.

75T34

66

021.340.015.14

1992, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251, 2252, 2253, 2254, 2255, 2256, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2273, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2284, 2285, 2286, 2287, 2288, 2289, 2290, 2291, 2292, 2293, 2294, 2295, 2296, 2297, 2298, 2299, 2300, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2308, 2309, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2322, 2323, 2324, 2325, 2326, 2327, 2328, 2329, 2330, 2331, 2332, 2333, 2334, 2335, 2336, 2337, 2338, 2339, 2340, 2341, 2342, 2343, 2344, 2345, 2346, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2360, 2361, 2362, 2363, 2364, 2365, 2366, 2367, 2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394, 2395, 2396, 2397, 2398, 2399, 2400, 2401, 2402, 2403, 2404, 2405, 2406, 2407, 2408, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2429, 2430, 2431, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, 2465, 2466, 2467, 2468, 2469, 2470, 2471, 2472, 2473, 2474, 2475, 2476, 2477, 2478, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 2492, 2493, 2494, 2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578, 2579, 2580, 2581, 2582, 2583, 2584, 2585, 2586, 2587, 2588, 2589, 2590, 2591, 2592, 2593, 2594, 2595, 2596, 2597, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2605, 2606, 2607, 2608, 2609, 2610, 2611, 2612, 2613, 2614, 2615, 2616, 2617, 2618, 2619, 2620, 2621, 2622, 2623, 2624, 2625, 2626, 2627, 2628, 2629, 2630, 2631, 2632, 2633, 2634, 2635, 2636, 2637, 2638, 2639, 2640, 2641, 2642, 2643, 2644, 2645, 2646, 2647, 2648, 2649, 2650, 2651, 2652, 2653, 2654, 2655, 2656, 2657, 2658, 2659, 2660, 2661, 2662, 2663, 2664, 2665, 2666, 2667, 2668, 2669, 2670, 2671, 2672, 2673, 26

5. *Journal of the American Statistical Association*, 1990, 85, 1039-1042.

834. 41. 194.

1946 1947 1948

MIGULIN, V. V.

MIGULIN, V. V.

Kreytser, V. L. defended his Doctor's dissertation in the Institute of Automatics and Telemechanics, Academy of Sciences USSR, on 6 December 1946, for the academic degree of Doctor of Technical Sciences.

Dissertation: "Nonlinear Distortions of Signal Wave Forms in Amplifiers".

Official Opponents: Profs. V. V. Migulin and S. Ye. Khaykin (Doctors of Physicomathematical Sciences) and L. G. Tager (Doctor of Technical Sciences)

SO: Elektrichestvo, No. 7, August 1953, pp 37-92 (W/29344, 16 Apr 54)

PA 50T101

USSR/Radio Waves
Radio Interference

Mar 1947

"Interference of Radio Waves," V. V. Migulin, 76 pp
"Uspekhi Fiz Nauk" Vol XXXIII, No 3

Author condenses his doctor's thesis presented in Mar 1945 at the Physics Institute, Academy of Sciences, USSR. Also presents several differences. Defines term "interference of radio waves" and gives methods to determine this interference. Discusses various types of radio interference: a) in the case of only one source of radiation, b) in the case of several sources of radiation, c) in the case of fluctuating radiation frequency, d) of IC

50T101

USSR/Radio Waves (Contd)

Mar 1947

modulated fluctuations, and e) interference method to measure speed of propagation of radio waves along earth's surface. Gives comprehensive list of books and articles on same subject.

IC

50T101

MIGULIN, V.V.

464

621.396.11.018.1 : 538.566

Investigation of the phase structure of the electromagnetic field and the velocity of radio waves. ALPERT, J. I., MIKULIN, V. V., AND RYASHIN, P. A. *J. Phys., U.S.S.R.*, 4, 1-2, pp. 13-38, 1944.—Starting from Sommerfeld's solution for the field of a vertical dipole at the surface of the earth, the authors compute the variation of the space phase of the Hertzian and vertical electric force vectors as a function of distance, frequency, ground conductivity and dielectric constant of the medium. The phase velocity can then be graphed against the distance. It is shown that, beyond the induction region, this velocity is lower than c and, as the distance increases, asymptotically approaches c . Phase/distance characteristics are calculated for the 2-frequency interferometers used in the experimental work. The dispersion interferometer measures the difference in the optical

path lengths of 2 waves of different frequencies and comprises 2 transmitters ($2f$ and $3f$) at one location and 2 receivers at another. The phases of the receiver-outputs are compared on a c.r. tube via Lissajous figures (accuracy $1''-2''$). A phase deviometer or dummy transmitter is used to check receiver phase shift and is described. The radio interference distance meter is a reflection system which measures the sum of the optical path lengths of the 2 transmitted signals. Experiments with the dispersion interferometer were inconclusive and contradictory, but tended to bring out that the dispersion was low and often masked by diffraction effects. More successful results were obtained by the reflection technique and these agreed with the theory. It is claimed in consequence that Zenneck's theory of plane waves and Sommerfeld's theory of surface waves are not compatible with experimental data. The work was done on medium waves.

J. F. R.

ASTM 5.4 METALLURGICAL LITERATURE CLASSIFICATION

ASTM 5.4

ASTM 5.4

1639
 Influence of the Earth's Surface upon Phase
 Structure of the E.M. Field of a Radiating Aerial.
 J. I. Alpert & V. V. Migulin. (*C. R. Acad. Sci.*
U.R.S.S., 1949, Vol. 16, No. 6, pp. 881-884. In
 English). An experimental study of the upward
 extent of the influence of the earth's surface on the
 propagation of radio waves. A transmitter with
 surface radiated two coherent oscillations with
 frequencies in the ratio 3/2 (wavelengths 120-180 m
 and 180-250 m) and observations of the phase
 difference $\Delta\phi = \phi_1 - \phi_2$ were made on receivers
 carried by captive balloons. It was found that the
 effect of the earth's surface, as shown by the
 magnitude of $\Delta\phi$, gradually diminishes with
 increase of height above the earth's surface and
 practically ceases at a height of about 18 km. The
 distances at which this effect was observed were
 10-15 km on the shorter wavelengths and
 15-20 km on the longer, and the total variation in $\Delta\phi$
 was about 10° on the shorter wavelengths and 15°
 on the longer.

B 66
G

2781. **Electromagnetic Field near a Transmitting Aerial.** J. L. Alpert, W. W. Migulin and P. A. Rjasin. *J. Techn. Phys. U.S.S.R.* 9. 9. pp. 894-930, 1939. *In Russian.*—Lately the question of the phase relations in the propagation of radio waves has gained special actuality in connexion with some new applications, as the interference method of investigating radio waves, the radio interference range-finder, and so on. Of unusual importance is the research of the phase structure of the electromagnetic field in the "distant" and "near" zones of a radiating aerial. On the basis of a previous paper of one of the authors concerning the calculation of the field of a straight aerial in the free space above ideally conducting ground and including, as a particular case, the field of a half-wave aerial in the near zone, the present paper gives, as a generalization of the mentioned results, an analysis of the phase structure of the field in the near zone for the case of a "prolongated" aerial, and the results of an experimental test of these formulae for different prolongations in the range of wavelengths 130 to 460 m. A satisfactory agreement of results and theory was obtained, as far as the calculation of the phases of the vertical component of the field above ideally conducting ground were concerned. From Sommerfeld's theory it follows that in the near zone both cases (that of ideally conductive ground compared to that of finite conductivity) differ between themselves by less than 1%. F. B. K.

TEST AND CHECK ORDERS																										PROCESSING AND PROPERTY NOTES																										TEST AND CHECK ORDERS																									
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50																																																																													
SA																										2792. On the Dispersion of Electromagnetic Waves above the Earth's Surface. J. L. Alpert, V. V. Migulin, and P. A. Riasin. <i>Comptes Rendus (Doklady) de l'Acad. des Sciences, U.S.S.R.</i> 18. 9. pp. 635-638, 1958. In English. From two neighbouring aeriels, 300 m. and 400 m. waves are sent out, respectively, a definite phase difference being maintained between the two wave trains. At a distance of several km. the waves are received on a single aerial to which two separate receivers are connected, and the phase difference between the two received trains is observed upon a cathode-ray tube. If dispersion has occurred, the received phase difference will differ from that at the sender. Experiments are described which show that over the sea, the velocities of the two waves cannot differ by more than 0.07%, whereas over dry land near Moscow, a difference of a few tenths per cent is possible. J. P. A.																										B 66 f																									
ASAC-54 METALLURGICAL LITERATURE CLASSIFICATION																																																																													
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50																																																																													

SA B 66 f

1052. Resonance Effects in a Non-linear System with Two Degrees of Freedom. V. Migulin. *Techn. Phys., U.S.S.R.* 4, 10, pp. 850-866, 1937. *In English.* A study is made of the basic peculiarities of the effects of combination resonance in unexcited oscillatory valve systems of the Thomson type, which may be considered as two partial coupled systems. An external e.m.f., having a frequency close to that of one of the combination tones of the two natural frequencies of the system, is applied, and the resulting oscillations are examined. From an approximate qualitative representation of the effects it is possible to classify the phenomena into a definite system and to determine the frequency ratios at which the phenomena occur. Experimental results confirmed the qualitative theory and gave data on the problem of the practical applicability of similar effects. A particular case is analysed by the method of "abbreviated" equations, and the results of this analysis are in good qualitative agreement with the experimental results for this case.

A. W.

ASTM-31-A METALLURGICAL LITERATURE CLASSIFICATION

600. Autoparametric Excitation of Oscillations. W. Migulin. *Techn. Phys., U.S.S.R.* 3, 10, pp. 841-859, 1936. In German. The work here described constitutes a test and further development of the parametric treatment of the so-called partial resonance and resonance of the n th kind. In their work on the latter (see Abstract 480 (1935)) Mandelstam and Papalexi put forward the possibility of producing known effects by autoparametric excitation. If this supposition is correct, such resonance phenomena should only be physically realizable when the frequency ratio is given by the equation $\omega/\omega_0 = 2/n$. Experimental evidence is given of the existence of such autoparametric phenomena for frequency ratios of $2/1$, $2/2$, $2/3$, $2/4$, $2/5$ and $2/6$. The autoparametric method makes it possible to formulate the conditions required for the choice of the analytical expression for non-linearity, so that for any particular case the known calculation method can be applied. This is done for the resonance with frequency ratio $2/3$ and the agreement with experimental results is satisfactory.

A. W.

ASM-A METALLURGICAL LITERATURE CLASSIFICATION

SEEING BOWLING

REFLECTS ONE ONLY 151

MIGULIN, V.M., kand.med.nauk

Result of the use of the fluorescent antibody method in the
diagnosis of gonorrhea. Vest.derm.i ven. 35 no.1:54-58 Ja '61.
(MIRA 14:3)

1. Iz kafedry kozhnykh i venericheskikh bolezney (nach. - chlen-
korrespondent AMN SSSR prof. S.T. Pavlov) Voenno-meditsinskoy
ordena Lenina akademii imeni S.M. Kirova.
(GONORRHEA) (ANTIGENS AND ANTIBODIES)

VOLKOV, Viktor Mikhaylovich, kand. tekhn. nauk; MIGULIN, I.N.,
kand. tekhn. nauk, retsenzent

[Logarithmic amplifiers using transistors] Logarifmiche-
skie usiliteli na tranzistorakh. Kiev, Tekhnika, 1965.
265 p. (MIRA 18:7)

MIGULIN, Igor' Nikolayevich [Myhulin, I.M.], kand. tekhn. nauk;
VOLENNER, E.F., doktor tekhn. nauk, prof., retirement

[Transient processes in transistor amplifiers] rezul'taty
protsesi v tranzystornykh podsluvechakh. Kyiv, tekhnika,
1964. 207 p. (MIRA 18:2)

MIGULIN, I.N.; CHAPOVSKIY, M.Z.

Effect of electrolytic capacitors on the temperature stability of
transistor amplifiers. Elektrosviaz' 18 no.6:63-66 Je '64.

(MIRA 18:1)

L 19356-65

ACCESSION NR: AP4041004

their transistors' emitters. A two-stage decoupled transistorized amplifier circuit is supplied. Orig. art. has: 6 figures and 5 formulas.

ASSOCIATION: none

SUBMITTED: 21Apr63

ENCL: 00

SUB CODE: EC

NO REF SOV: 003

OTHER: 002

Card 2/2

L 19056-65 ASD(a)-5/AFETR/RSD(t)

ACCESSION NR: AP4041004

S/0106/64/000/006/0063/0066

AUTHOR: Migulin, I. N.; Chapovskiy, M. Z.

TITLE: Effect of electrolytic capacitors upon the temperature stability of transistorized amplifiers ¹³

SOURCE: Elektrosvyaz', no. 6, 1964, 63-66

TOPIC TAGS: amplifier, transistorized amplifier, amplifier temperature stability, capacitor, electrolytic capacitor

ABSTRACT: The instability of the gain in transistorized amplifiers due to temperature variation in the resistance of electrolytic capacitors used in emitter circuits is considered. It was experimentally found, in the well-known stabilized Shea's circuit, that the gain varies by 3 db per stage in the -60+60C temperature range. The residual feedback and the gain-temperature dependence can be considerably reduced by using decoupling filters between all signal circuits and

Card 1/2

MIGULIN, I.N. (Kiyev)

Quasicorrelation method for analyzing transients in linear systems.
Avtom. i telem. 24 no.10:1351-1359 0 '63. (MIRA 16:11)

MIGULIN, I.N.; CHAPOVSKIY, M.Z.

Dependence of the input admittance of transistors on temperature and collector current. Radiotekh. i elektron. 8 no.12:2066-2070 D '63. (MIRA 16:12)

GERASIMOV, S.M.; MIGULIN, I.N.; YAKOVLEV, V.N.; MASHAROVA, V.G.,
red.; BELYAYEVA, V.V., tekhn. red.

[Fundamentals of the theory and design of transistor
circuits] Osnovy teorii i rascheta tranzistornykh skhem.
Moskva, Izd-vo "Sovetskoe radio," 1963. 663 p.

(MIRA 16:10)

(Transistor circuits)

MIGULIN, I.N.; CHAPOVSKIY, M.Z.

Temperature dependence of amplification factor and methods for
stabilizing transistor amplifiers. Radiotekh. i elektron. 7
no.8:1409-1416 Ag '62. (MIRA 15:3)
(Transistor amplifiers)

Correlation method ...

S/142/62/005/001/005/C12
E140/E435

3 figures and 2 tables.

ASSOCIATION: Kafedra radiopriyemnykh ustroystv Kiyevskogo ordena
Lenina politekhnicheskogo instituta
(Department of Radioreceiving Equipment of the Kiyev
Order of Lenin Polytechnical Institute)

SUBMITTED: May 5, 1961 (initially)
July 10, 1961 (after revision)

Card 2/2

S/142/62/005/001/005/012
E140/E435

C 9200

AUTHOR:

Migulin, I.N.

TITLE:

Correlation method of estimating the quality of
transient processes in linear systems

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Radiotekhnika.
v.5, no.1, 1962, 51-57

TEXT: The author proposes to estimate transient quality by calculating the cross-correlation integral using the real impulse characteristic $h'(t)$ of the system and a known $f(t)$ for which the delay and establishment time can be easily found. In fact the $f(t)$ proposed is $\cos \omega(t - t_0)$. By adjusting ω and t_0 for maximum correlation the response parameters are defined to a fairly close approximation. However, in contradistinction to other estimates of transient duration, this one is based on the time to the first maximum. Comparison of the results obtained by the method proposed here with exact solutions for linear filter systems of up to $n = 9$, n the number of identical sections, shows that the error is not more than about 25% and decreases with the number of sections to 4% with 4 sections. There are

Card 1/2

MIGULIN, I N

PHASE I BOOK EXPLOITATION

SOV/5586

Gerasimov, Sergey Mikhaylovich, Igor' Nikolayevich Migulin, and Vasilii Nikolayevich Yakovlev

Raschet poluprovodnikovvkh usiliteley i generatorov (Design of Semiconductor Amplifiers and Generators) 2d ed., rev. and enl. Kiyev, Gostekhizdat UkrSSR, 1961. 430 p. 25,000 copies printed.

Ed.: Yu. Ye. Korsak; Tech. Ed.: S.M. Matusevich.

PURPOSE: This book is intended for engineering and technical personnel concerned with the application of semiconductor devices. It may also be useful to students of radio engineering divisions in schools of higher education and to advanced radio amateurs.

COVERAGE: The book discusses calculation principles of transistorized amplifiers, generators, and pulse circuits. Chs. I, II, III, and XII were written by I.N. Migulin; Chs. IV, V, and VI by S.M. Gerasimov; Chs. VII, VIII, IX, X, and XI by V.N. Yakovlev. References to each chapter are listed separately in the Bibliography. There are 43 references: 37 Soviet and 6 English.

Card 1/9

SOV/112-59-24-50834

Translation from: Referativnyy zhurnal Elektrotehnika, 1959, Nr 24, p 214
(USSR)

AUTHOR: Migulin, I.N.

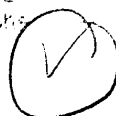
TITLE: Semiconductor Amplifier With a High Input Resistance in a Broad Frequency Band

PERIODICAL: Tr. Sektsii poluprovodn. priborov. Ukr. resp. pravl. Nauchno-tekhn. o-va radiotekhn. i elektrosvyazi, 1958, Nr 1, pp 5 - 11.

ABSTRACT: A method of obtaining a high input resistance (R_{in}) of transistor amplifiers in a broad frequency band is discussed. The method is based on the use of specially selected negative feedback circuits with a subsequent voltage supply to the input. The circuit of such an amplifier with a negative feedback is described and calculation method is given. It is pointed out that the circuit in question has two advantages: 1) having a high R_{in} it secures a considerable current amplification; 2) on account of a deep negative feedback the internal noise level is markedly reduced in the circuit.

Card 1/1

V.M.L.



MIGULIN, I.N.

Calculating multistage amplifiers having junction transistors.
Elektrosviaz' 11 no.6:34-41 Je '57. (MLRA 10:6)
(Transistor amplifiers)

MIGULIN, I. N.

I. N. Migulin, "Use of feedback to improve the indices of semiconducting amplifiers." Scientific Session Devoted to "Radio Day", May 1958, Trudrezervizdat, Moscow, 9 Sep 58.

Use of a specially selected negative feedback circuit with series feed to the input permits a constant and high input impedance to be obtained in a wide range of frequencies in semiconducting triode amplifiers. A condition for which the input impedance is independent of the frequency is easily obtained successfully on the basis of the derivation of expressions of the equivalent triode parameters connected in a feedback amplifier.

A method has been developed which permits the circuit parameters to be determined uniquely in terms of given magnitudes of the input impedance and frequency band.

A method is analyzed of increasing the input impedance and, therefore, the limiting amplification frequency by neutralizing the internal feedback supply to the input back voltage.

Variations of practical amplifier circuits with neutralization and an experimental investigation thereof are presented.

Calculation of Semiconductor (Cont.)

SOV/3890

V.M. Yakovlev, and chapters IX, X, and all appendixes were written collectively by all three authors. There are 36 references: 32 Soviet (2 of which are translations), 3 English, and 1 German.

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MIGULIN, I.N.

PHASE I BOOK EXPLOITATION

SOV/3890

Herasymov, Serhey Mykhaylovych, Ihor Mykolayevych Myhulin, and
Vasyl' Mykolayevych Yakovlyev

Rozrakhunok napivprovidnykovykh pidsylyuvachiv i heneratoriv (Cal-
culation of Semiconductor Amplifiers and Generators). Kyiv,
Derzhtekhvydav URSR, 1958. 287 p. 2,500 copies printed.

Ed.: Yu.Ye. Korsak; Tech. Ed.: R. Bezp'yatov.

PURPOSE: This monograph is intended for engineers and technicians
working in the field of semiconductor devices, for students
of radio engineering departments of schools of higher education,
and for technically advanced radio amateurs.

COVERAGE: The book summarizes recent advances in design and use
of semiconductors in solid-state electronics, mainly in ampli-
fiers and generators. Methods of calculating semiconductor para-
meters relative to their application to particular devices are
outlined and evaluated, and requirements according to type of
operation are given. Chapters I and II were written by I.M.
Myhulin; chapters III-V by S.M. Herasymov; chapters VI-VIII by

Card 1/8

MIGULIN, I. N.

CIRCUITS

"Contribution to the Design of Multistage Amplifiers with Junction Transistors," by I.N. Migulin, 'Elektrosvyaz', No 6, June 1957, pp 34-41

The generalized theory of transistor and vacuum tube amplifiers, developed by Kulikovskii in the November 1955 issue of Radiotekhnika and by Migulin in the September 1956 issue of 'Elektrosvyaz', is used to present an analysis and a design procedure for junction transistor amplifiers.

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- 7 -

MIGULIN, I. M. Cand Tech Sci -- (diss) "Problems of the theory and calculation of boosters on plane semi-conductor triodes." Kiev, 1957. 10 pp (Min of Higher Education UkSSR. Kiev Order of Lenin Polytechnic Inst) (KL, 43-57, 89)

MI 8001A/IN

USSR /Electronics

H

Abs Jour : Ref Zhur - Fizika, No 4, 1957, No 9844

Author : Migulin, I.N.

Inst : Not given

Title : Equivalent Circuits in Parameters of Junction Transistors

Orig Pub : Elektrosvyaz', 1956, No 9, 46-53

Abstract : The author considers a system of low-frequency and high-frequency parameters of junction transistors, which makes it possible to generalize the theory of semi-conductor and vacuum tube amplifiers. A simple interpretation of the frequency dependence of the transistor parameters is given. Equivalent circuits are shown, and the fundamental formulas are derived for them. Experimental results are given.

Card : 1/1

CHAPOVSKIY, Mikhail Zakharovich [Chapova'kyi, M.Z.], inzh.;
MIGULIN, I.M. [Myhulin, I.M.], kand. tekhn. nauk,
retsenzent

[Methods for stabilizing transistor amplifiers] Metody
stabilizatsii tranzystornykh pidsylyuvachiv. Kyiv,
Tekhnika, 1964. 194 p. (MIRA 17:11)

MIGULIN, A.A.

Characteristics of the change in the abundance of main agricultural
and forest pests. Vop. ekol. 7:114-117 '62. (MIRA 16:5)

1. Sel'skokhozyaystvennyy institut, Khar'kov.
(Insects, Injurious and beneficial)

MIGULIN, A.A.

Fractures of population changes of voles inhabiting fields of
the Ukrainian S.S.R. Zool.zhur. 34 no.6:1389-1403 N-D '55. (MLRA 9:1)

1. Kafedra zoologii i entomologii Khar'kovskogo sel'skokhozyaystvennogo
instituta imeni V.V.Dokuchayeva.

(Ukraine--Field mice)

ZHURAVIN, Yu.; MIGULEVA, R.

Conference of the readers of "Promyshlennaya energetika". Prom.-
energ. 17 no.10:48 0 '62. (MIRA 15:9)
(Power engineering--Periodicals)

30161
P/045/61/020/011/004/004
B102/B108

Preparation and the...

lustreless material. The forbidden band widths were 0.41 ev and 0.53 ev respectively. The discrepancies between electrical and optical test results may be due to complex band structure and degeneration. There are 8 figures and 7 references: 2 Soviet-bloc and 5 non-Soviet-bloc. The two references to English-language publications read as follows: Tannenbaum, M., Briggs, H. B., Phys. Rev. 91, 1561 (1953); Burstein E. Phys. Rev. 92, 632, 1954.

ASSOCIATION: Institute of Physics, Polish Academy of Sciences, Warsaw

SUBMITTED: May 11, 1961

Card 3/3

P/045/61/020/011/004/006
B102/B108

Preparation and the...

the brilliant material $\ln \mu$ rises nonlinearly with $1/T$. Optical transmission and absorption were measured and compared for the two varieties. In the spectral range investigated ($0.5 - 15 \mu$), the two modifications showed different behaviors. The position of the absorption edge could be found only for the brilliant CdSb. From thermo-emf measurements it was found that both modifications were of the n-type. At nitrogen temperature $n = 4.4 \cdot 10^{16} \text{ cm}^{-3}$ for the lustreless and $n = 5.5 \cdot 10^{17} \text{ cm}^{-3}$ for the brilliant variety. The electron concentration in both cases depends on the structural defects and deviations from the stoichiometric composition. The fact that the brilliant material contains more defects is ascribed to their freezing in during rapid cooling. For both varieties it was found that the mobility values as determined from Hall effect and conductivity differed considerably from those determined from the resistivity versus magnetic field curves: 106 and $420 \text{ cm}^2/\text{v} \cdot \text{sec}$ was found for the lustreless and 18 and $280 \text{ cm}^2/\text{v} \cdot \text{sec}$ for the brilliant modification. This is ascribed to the polycrystalline nature of the specimens. The maximum activation energies were found to be 0.082 eV for the brilliant and 0.37 eV for the

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30167
P/045/61/020/011/004/00
B102/B108

24.7700 (1035, 1385, 1482)

AUTHORS:

Giriat, W., Migula, Z., and Sikorski, A.
Preparation and the electrical and optical properties of
cadmium antimonide

TITLE:

PERIODICAL: Acta Physica Polonica, v. 20, no. 11, 1961, 919-925

TEXT: CdSb was produced from a stoichiometric mixture of the pure
elements (impurity content less than $10^{-5}\%$). Rapid cooling after melting
(melting point 456°C) yielded a brilliant and brittle material. slow
cooling a lustreless material, which did not change its properties. CdSb was pu-
rified by zone melting, which consisted of large crystallites
vestigation showed that the material measure electrical conductivity. Hall
coefficient, and the dependence of resistivity on the magnetic field
strength in the temperature range $78 - 370^{\circ}\text{K}$. The curves plotted for the
two varieties of the material differed considerably. In particular, the
Hall mobility versus temperature curves have opposite inclinations. For
the lustreless material $\ln \rho$ decreases linearly with increasing $1/T$. For
Card 1/3

MIGUL, A.

RULYANOV, V.A., WANG YUNG-CHANG, VERNIER, V.I., VIRYANOV, N.M., VRANA, I.,
DU TIAN-TEAT, KIM HU IN, ELAJETIKRAYA, Ye. N., KUZNETSOV, A.A., MIGUL, A.,
KHUYEN DING TI, I. PATIPA, V. PENEV, GORDOVA, Ye. G., GOLWERT, H.T.,
HOFMEL, T., and TSEN LIN-TAN

"The Investigation of Λ -Hyperon and K^0 -Meson Production in $\bar{u}Q$ and
Interactions at 7-8 GeV"

report presented at the Intl. Conference on High Energy Physics, Geneva,
4-11 July 1962

Joint Institute for Nuclear Research
Laboratory of High Energies

MIGUL, A.

DELYAKOV, V.A., HANG YUNG-CHANG, WINDTHER, V.T., VIRTANOV, N.M., DU THANH-THAT,
KIM HI TH, KLATHITSKAYA, Ye. N., KUZNETSOV, A.A., RIKHOI, A., BERNH. DIN TI, FISHOV, V.N.,
GORKLOVA, Ye. G., SOLOVYEV, M. I.

"Study of ΛK and $K_1^0 K_1^0$ Inter Production in $\pi^- p$ and \bar{K}^0 Interactions at the
7-8 GeV/c Momentum of π^- Beams"

report presented at the Intl. Conference on High Energy Physics, Geneva,
4-11 July 1962

Joint Institute for Nuclear Research
Laboratory of High Energy Physics

MIGUKIN, F.M., inzh.; ROGACHEVSKIY, TS.A., inzh.; IOFIK, B.M., inzh.;
LEPYANSKIY, Ya M., inzh.

New conveyor for lap transport. Tekst.prom. 21 no.5:51-53 My
'61. (MIRA 15:1)

1. Gosudarstvennyy proyektnyy institut no.3.
(Textile industry--Equipment and supplies)
(Conveying machinery)

BABETSKIY, Mark L'vovich; MIGUKIN, Aleksandr Timofeyevich;
KARMAKHENSKIY, A.N., red.

[Organization of the repair of earthmoving machinery and
repair equipment attachments] Organizatsiia remonta zemle-
roinykh mashin i remontnye prisoobleniia. Leningrad,
1964. 27 p. (KIRA 18:3)